

A study on talent retention of woman in southern peninsular of Malaysia manufacturing industry

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Abstract

Purpose: The engagement of women in Malaysia's workforce has witnessed a decline, dropping to 55.5% in 2021, a notable contrast to the considerably higher rate of 80.9% observed among men. Consequently, this study aims to explore the interconnection among workplace environment, career advancement prospects, workplace flexibility, work-life balance, and the retention of female employees within the manufacturing sector in Southern Malaysia.

Design/methodology/approach: This study employs questionnaire data from individual female employees across various management levels in manufacturing firms located in Pasir Gudang, Johor. The research methodology includes the administration of survey questionnaires through Google Forms, and all gathered data will be analyzed using the IBM Statistical Package for Social Science (SPSS) Statistics version 29.0.1.0.

Finding: The findings indicate a significant positive correlation between employee retention and both workplace environment and career development. Conversely, the study suggests that there is no statistically significant relationship between workplace flexibility or work-life balance and the improvement of employee retention.

Research limitations/implications: The limitation of this research is that it solely concentrates on female employees within the manufacturing industry in Pasir Gudang, Malaysia. Consequently, the results may not be representative of all female employees in Malaysia's manufacturing sector. Therefore, this may lead to constraints in interpreting the findings and may not adequately reflect the employees' perceptions regarding talent retention.

Practical implications: This study provides an explanation of how these four factors can be approached differently by organizations to retain their talented employees. These practical implications may be applicable to the manufacturing industry in Malaysia.

Originality/value: In Malaysia, it appears that manufacturing companies offer equal employment opportunities to women. The findings of the study indicate that the manufacturing sector should prioritize understanding and emphasizing key factors to improve the experiences of female employees. This would provide advantages for both employees and employers. Such an approach aims to retain talented female employees while contributing to the accomplishment of the organization's strategic goals.

Keywords: Workplace Environment, Career Development, Workplace Flexibility, Work-Life Balance, Talent Retention.



Introduction

The management ethos of the 21st century asserts that knowledge economies compete based on skills and talent. A current global challenge is the imperative to attract and retain more qualified women in the workforce. Research focused on women (ILO, 2018) has reached a consensus that increasing the presence of women in the workforce not only mitigates business risks but also enhances competitiveness and productivity. Women constitute approximately 49.58% of the global population (Statistic Times, 2021), highlighting the need to increase female talent involvement in the economic sector.

Women participate in the workforce for both economic and social reasons. Subramaniam et al. (2015) point out that the life cycles of female labor force participation (FLFP) rates vary more than males and differ between countries, generally remaining lower than men at all stages of life. Additionally, women's involvement in the workforce boosts household income, aiding emerging economies (Chowdhury, 2013).

Working women often face dual responsibilities, managing households, motherhood, and meeting employee expectations. A survey on "Retaining Women in the Workforce" (ACCA, 2013) revealed that Malaysian women visibly desire workplace flexibility (WF) to accommodate family commitments, optimal work-life balance (WLB), and equal opportunities and rewards. Therefore, a strategic approach to employing women becomes increasingly crucial in the ongoing challenge of finding and retaining talented employees (Izmayani, Khalijah, Husna, & Nurul, 2016).

The pandemic of COVID-19 has introduced new challenges, compelling organizations to make radical changes in the workplace (Carroll & Conboy, 2020). These changes necessitate a proactive response and preparedness for potential adversities (Mohameh & Aisha, 2020). The term "new normal" has emerged post-pandemic, denoting conditions that require reaction, realization, and subsequent reflection on the essence of sudden and frequent life challenges (Mohameh & Aisha, 2020; Levenson, 2020).

In the aftermath of the pandemic, the work environment poses fresh challenges in human resource management (HRM), particularly regarding turnover intentions. Despite expectations for Malaysia's labor market conditions to rebound following the economic downturn induced by the COVID-19 pandemic (World Bank, 2022), the labor force participation rate (LFPR) for women in Malaysia remains relatively low, standing at 55.3% in 2020, as reported by the World Bank. This figure is lower than that recorded in other Southeast Asian countries, such as Singapore (69.7%) and Thailand (66.8%).

According to research conducted by by Alon et al. (2020), women's economic and productive engagements are notably influenced in distinct ways compared to men. Malaysian women possess talent, characterized by specific skills, knowledge, capabilities, and experiences requisite for meeting current and future demands across various economic sectors (Rohani et al., 2023). The study by Izmayani et al. (2016) emphasizes that the recruitment and retention of talented women require modifications in work-life balance (WLB) and other factors pertinent to women's professional endeavors.

A survey conducted in 2021 on the global economy highlighted a decline in the female labor force participation rate in Malaysia, dropping from 51.47% in 2020 to 51.19% in 2021. According to the World Bank (2022), the labor force participation rate for Malaysian women stood at 55.5% in 2021, compared to 80.9% for men. However, a notable proportion of female employees are departing from their current organizations post-pandemic due to shifts in work performance, dissatisfaction with the prevailing working environment, and the pursuit of better career opportunities (Dina, 2021).

Workplace flexibility (WF) and work-life balance (WLB) emerge as pivotal factors for employee retention in the post-pandemic era. A "2023 Employer Brand" research report



indicates that 96% of employees are seeking more WF opportunities, with 50% of Malaysians expressing readiness to resign from their current positions to enhance WLB. Findings from the "EY 2021 Work Reimagined Employee Survey," conducted by Employment Hero, reveal that 90% of Malaysians, among 16,000 employees spanning 16 countries across 23 industries, including Malaysia, require flexibility in managing their work and family life.

Moreover, research by the World Bank indicates that over 38.5% of Malaysian women encounter high unemployment rates, encompassing both skill-based (36.9%) and time-based (1.6%) employment. Although a slight decrease in both rates was observed in Q1 2022 (World Bank, 2022), Malaysia's Female Labor Force Participation (FLFP) rates surpassed 51.37% in 2018 and reached 55% in the second quarter of 2020.

Despite the significant advancements made by women in recent decades (Bhattacharya, 2022), the COVID-19 pandemic prompted numerous female employees to reassess their priorities and life aspirations. According to Priya and Sudhamathi (2019), employees today are presented with abundant choices, with many opting to transition out of their current careers or embark on entrepreneurial ventures in pursuit of new challenges (Azami et al., 2023; Bhattacharya, 2022). While manufacturing industries prioritize productivity, standard operating procedures, and employee health and safety, they often overlook the challenges encountered by women employees, especially amid the pandemic. Consequently, it is crucial for organizations to grasp the needs of female employees before their reintroduction to the workplace. They must ensure that the nature of work and the design of office spaces facilitate the cultivation of secure, productive, and gratifying professional and personal lives for their workforce (McKinsey, 2020).

Based on the 2020 data, Malaysia's FLFP rate surpassed the 2019 global average figure. Against the backdrop of the evolving COVID-19 work landscape, organizations and Human Resources (HR) departments must address the concerns of their female employees to attract, retain, and leverage the potential talent of women amid the growing demand for a more inclusive, diverse, and equitable workforce. It is evident from the foregoing discussion that this study will center on the cognitive aspect, particularly focusing on women employees. Stepping into the new normal, organizations must rapidly respond and efficiently adapt to change. Understanding the 'what' behind the change and 'why' is essential for developing a new perspective and creating a new ideology for future secure strategies (Buheji, 2020).

The research aim holds significance in delving deeper into the factors contributing to the underrepresentation of women in the Malaysian workforce and formulating suitable remedies to address associated challenges. The research objectives are outlined as follows:

- 1. To investigate the correlation between the work environment and the retention of female talent.
- 2. To assess the relationship between career development opportunities and the retention of female talent.
- 3. To explore the association between workplace flexibility and the retention of female talent.
- 4. To ascertain the connection between work-life balance and the retention of female talent.

Literature Review

Talent Retention

The concept of talent retention emerged in business during the 1970s. Employee retention involves processes aimed at encouraging employees to remain with the company for longer periods (Raminder, 2017; Chandra, 2016). Talent retention is a critical aspect of strategic HRM that helps companies sustain a competitive advantage (Karatepe, 2013; Chandranshu & Ruchi,



2012; Mohlala, Goldman, & Goosen, 2012). Talented employees are often able to easily find better career opportunities or change jobs. According to Eric Ng et. al. (2012), retaining key employees is a challenging practice for organizations, requiring leaders to make significant efforts to maintain low turnover rates. McKeown (2002) views talent retention as the employer's efforts to keep high-performing employees to achieve organizational vision, mission, and objectives. Effective talent retention involves employers creating and nurturing an environment that encourages current employees to stay by implementing practices and strategies that meet their diverse needs.

Azeez (2017) highlighted the company's responsibility to achieve their goal to retain an attractive workforce with a specific end goal in mind. According to Chandranshu and Ruchi (2012), retention is a complex concept without a single solution for keeping employees. Therefore, when a competent employee leaves the organization, they create a gap in vital skills, knowledge, and abilities that are transferred elsewhere (Nishiura, et al., 2021; Ivana, 2020; Basnyat & Lao, 2019). In Kurdi and Alshurideh studies (2020), they explained explained that employee retention strategies are used by organizations to encourage employees to remain long-term.

Foong et al. (2015) found that employee retention is significantly associated with the work environment in Malaysian manufacturing companies. Additionally, employees are more loyal if there is a positive work environment, along with rewards and compensation that meet their aspirations (Pittino, Visintin, Lenger, & Sternad, 2016). A survey on "Retaining Women in the Workforce' (ACCA, 2013), found that Malaysian women visibly desire flexible work arrangements (FWA) that accommodate family commitments, support maternal needs, provide optimal work-life balance, and offer equal opportunities and rewards. Previous studies (Izmayani, Khalijah, Husna, & Nurul, 2016; ACCA, 2013; Jakobsh, 2012), indicate that career development for women is more challenging compared to men, as women often have to prioritize work and family life over education and career progression.

Workplace Environment

The workplace environment (WE) encompasses a blend of social, technical, and economic elements that are ingrained within an organization's structure and management approach (Luque-Vílchez, Mesa-Pérez, Husillos, & Larrinaga, 2019). A supportive and adaptable WE is paramount for fostering employee retention (Kossivi, Xu, & Kalgora, 2016). Scholars highlight that WE encompasses not only physical components such as designs, tools, and equipment but also the psychosocial environment, incorporating aspects like worker and workplace safety, security, involvement in decision-making, interpersonal relationships, acknowledgment (Helena, 2021; Amabile, 2019). Dessler (2019) elucidates various examples of WE elements, encompassing immediate surroundings, personnel, furnishings, machinery, structures, and infrastructure. Additionally, WE significantly influences employees' decisions to remain at their current place of employment (Frye, Kang, Huh, & Lee, 2020; Halim & Azizan, 2017).

In manufacturing, employees integrate these values into their daily routines, involving the operation of machines, use of hand tools, and other tasks. This underscores the imperative for vigilant oversight from governmental and regulatory entities to uphold safety and health protocols, given their status as both employee entitlements and legal obligations (Foong et.al,. (2015)). Consequently, as elucidated by Zeytinoglu & Denton (2006) workplace environment emerges as a paramount determinant of employee retention within the organizational framework.



Career Development

Career development serves as a strategic approach adopted by organizations to provide employees with avenues for personal growth and advancement (Farah, 2016). It entails the expansion of knowledge, talents, skills, and competencies, which play pivotal roles in employee retention and engagement (Vicky, Rohani, Khalidah, Muhammad, & Siti, 2023). Bandana and John (2019) emphasize the necessity for organizations to develop customized career strategies that resonate with the individual needs and aspirations of their employees. Employee learning and development constitute integral components of their professional journey, enabling them to acquire the requisite competencies for their roles (Mehdiabadi & Li, 2016). As such, employee learning and development represent critical facets of their professional trajectory, facilitating the acquisition of necessary skills for their designated positions.

Furthermore, Bandana and John (2019) suggest that employers should engage in regular, iterative career conversations with employees instead of relying solely on annual development reviews. In relation to this, researchers (Vicky, Rohani, Khalidah, Muhammad, & Siti, 2023; Mehdiabadi & Li, 2016) argue that every career should provide opportunities for growth and development, and employees must continuously improve their skills and competencies to perform their roles effectively (Farah, 2016).

Workplace Flexibility

Workplace flexibility (WF) has emerged as a prevalent practice not only in Malaysia but also across numerous countries worldwide. WF is delineated as "the ability of workers to exert influence over when, where, and for how long they engage in work-related activities" (Hilla, et al., 2021). At the core of this definition lies employees' capacity to select and organize fundamental aspects of their everyday work routine. Hall and Atkinson (2006) posit that WF, from an organizational standpoint, encompasses flexibility in working hours, schedules, and locations. Scholars characterize WF as employees adapting job structures, including the timing and/or venue of work, to accomplish daily tasks (Farah, 2016; Geetha, Overton, & Maniam, 2015; Creagh & Brewster, 1998).

In "Managing Human Resources" (Gómez-Mejía, Balkin, & Cardy, 2012), it is explained that WF allows employees to control their job arrangements, such as the start and end times of their routine work schedules. According to Buheji (2020), the 'next normal' era will differ significantly from the pre-COVID-19 years. Due to the changing workplace environment (WE), many Malaysian companies have implemented flexible work arrangements (FWAs). Illustrative instances of FWAs encompass a spectrum of arrangements, such as flexible scheduling, remote work opportunities, telecommuting, permanent part-time roles, and intervals for career hiatus. (Geetha, Overton, & Maniam, 2015). Additionally, FWAs encompass work hour schedules, such as shift work and break time arrangements, part-time jobs, and job sharing (Farah, 2016; Idris, 2014).

Work Life Balance

The issue of work-life balance (WLB) emerges as a pivotal concern in contemporary times (Downes & Koekemoer, 2011). WLB is delineated as the harmonious equilibrium between an individual's professional obligations and personal pursuits (Bal, 2010). Karatepe (2013) posits that furnishing emotional support and ensuring WLB for employees can notably mitigate turnover rates. Similarly, Downes and Koekemoer (2011) underscore the diverse advantages of WLB, spanning from bolstering employee allegiance to enhancing dedication. Consequently, WLB has become increasingly important for employees and tends to influence



their decision to remain with or leave an organization (Kossivi, Xu, & Kalgora, 2016; Mehta, Kurbetti, & Dhankhar, 2014).

WLB issues arise when the demands from work and family roles conflict (Linehan, Ann, & James, 2002), with working women experiencing more stress than their male counterparts (Burke & McKeen, 1994). A Study on Women's Career Advancement in Malaysia (2013) reviewed WLB literature and found that practices and policies are increasingly aimed at removing gender-based barriers to women's career progression. According to a survey on "Retaining Women in the Workforce" in Malaysia (ACCA, 2013), the primary reason women leave the workforce is to raise a family (65%), followed by a lack of WLB (43%), and to care for a family member (38%).

Theoretical Framework of work environment, career development, workplace flexibility and work-life balance

Herzberg's Two-Factor Theory, alternatively referred to as the motivation-hygiene paradigm. (1959), differentiates between two categories of factors. Hygiene factors are related to basic survival needs, including the reward system, wages, and interpersonal relationships (Herzberg, 2003). Conversely, motivational elements encompass accomplishment, acknowledgment, intrinsic aspects of the job, accountability, progression, and avenues for development. (Herzberg, 2003).

Maia (2011) and Dion (2006) propose that this theory is linked to job satisfaction and dissatisfaction, which in turn affects employees' decisions to remain with or leave an organization (Farah, 2016; Tan & Waheed, 2011). Dissatisfaction can arise from issues such as company policies, leadership supervision, relationships with superiors, working conditions, salaries, and peer relationships. On the other hand, satisfaction generally arises from accomplishments, acknowledgment, intrinsic job characteristics, accountability, progress, and developmental opportunities. Career growth or development satisfaction has been demonstrated in previous studies (Alshmemri et al., 2017; Farah, 2016; Tan & Waheed, 2011) to significantly contribute to employee retention. Dissatisfaction with working conditions, potentially due to inflexible working hours, can influence an employee's decision to leave the company (Alshmemri et al., 2017; Farah, 2016).

As a cornerstone, Herzberg's Motivation-Hygiene Theory (1959) underpins this paper, which examines the correlation between the work environment, career advancement, workplace flexibility, and work-life equilibrium concerning employee retention. The theoretical framework, derived from Farah (2016) and elaborated further on the basis of Herzberg's Motivation-Hygiene Theory, elucidates the manner in which diverse organizational practices linked to the work environment, career progression, workplace flexibility, and work-life balance influence employee retention. This impact is manifested through their role in either fostering or alleviating employee satisfaction or dissatisfaction within the organizational milieu (see Figure 1).



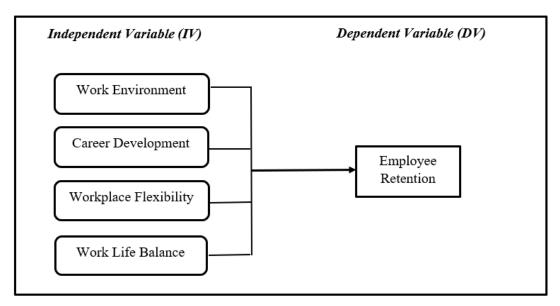


Figure 1: Research Framework

Hypothesis Development

People tend to enjoy their work in organizations that provide a favorable or harmonious work environment (Wells & Thelen, 2002). According to the survey of Asghar, et al. (2021), specific guidance within the workplace can further reduce stress, enhance employee attitudes, and lower organizational turnover rates. As new work situations emerge, it is essential for organizations to maintain good track records (Jayalakshmi, 2023). Compared to the past, the current workplace is different, more diverse, and continuously evolving (Bhattacharjee, Jahanshahi, Polas, Hossain, & Asheq, 2019). Balwa, et al.(2021) emphasized that the work environment can significantly affect employees' productivity, safety, health, and psychological well-being.

The Coronavirus disease 2019 (Covid-19) has compelled organizations to make a sweeping transition to remote working (Chan et.al, (2023); Caringal-Go et al. (2022)), and it has proven difficult to reverse this shift post-pandemic (Carroll & Conboy, 2020). Moving forward, it is crucial for employers to ensure that the work environment after Covid-19 is both positive and comfortable for employees returning to the workplace. According to the Occupational Safety and Health Act 1994 (OSHA, 2000), Malaysian employers are required to provide a legislative work environment that ensures the safety, health, and welfare of all workers. Organizations must create a safe and healthy working environment, thereby improving job satisfaction and enhancing work quality(Sadick, Kpamma, & Agyefi-Mensah, 2020). In addition, employers are obligated to offer a job environment free from danger, with health and safety responsibilities shared by those who work with the risks and those who create the risks(Lawrence & Weber, 2014). Previous research consistently reveals that the work environment is a critical determinant of employee retention. Therefore, it is hypotheses that: H₁: There is a significant relationship between the work environment and talent retention.

Career development is one of the key drivers for employee retention. Based on a study by Mehta, et al. (2014), career development has the strongest impact on employee retention, whereas the impact of financial rewards is comparatively less. Similarly, Mbugua and Kamaara (2017) found that career development significantly contributes to talent retention. Providing training and development opportunities helps employees grow and progress in their careers (Garavan, Carbery, & Rock, 2012). According to a survey conducted by the Global Workforce



Study byTowers Watson (2023), 57% of respondents feel they have opportunities for personal development and growth within their current organization.

Atkinson (2023) and Bernsen, et al. (2009) suggest that organizations can enhance visibility and transparency for employees, ensuring they understand and explore the range of career development options available to help them build their careers. Employees can enhance their job attributes and performance by focusing on career development (Vicky, Rohani, Khalidah, Muhammad, & Siti, 2023) Additionally, this perspective may lead employees to appreciate the breadth and depth of opportunities available within their current organization (Atkinson, 2023). Based on the above empirical findings, the following hypothesis is proposed:

 H_2 : There is a significant relationship between career development and talent retention.

According to the "Flexible Working Arrangement Work-life Balance and Women in Malaysia" (2015), a majority of respondents (86%) expressed a keen interest in flexible working arrangements within their workplaces. This sentiment aligns with research conducted in Malaysia's neighboring country, Singapore, as evidenced by findings from Lim, et al. (2001), which indicated that increased family time and reduced commuting time are primary reasons why women prefer flexible schedules and location flexibility.

Furthermore, flexible work schedules, as noted by Scandura and Lankau (1997), offer various benefits including stress reduction, enhanced job enrichment, decreased tardiness and absenteeism, heightened job satisfaction, and increased productivity. Several studies examining the literature on work flexibility have also highlighted that flexible working arrangements enable employees to align their work with their biological rhythms (Azeez, 2017; Farah, 2016; Idris, 2014; Scandura & Lankau, 1997). Based on the findings, the existence of a positive correlation between workplace flexibility and employee retention is substantiated, leading to the following hypothesis:

H₃: There is a significant relationship between flexible workplace and the talent retention.

Work-life balance is crucial for engagement and significantly influences retention (Das & Baruah, 2013). Geetha, et al. (2015) said many working women face serious challenges with work-life balance. They found that the primary reasons for this issue among women in Malaysia include the difficulty of managing both work and home responsibilities effectively, as well as the patriarchal view that household duties are solely a woman's responsibility (Geetha, Overton, & Maniam, 2015). A survey from the 2022 Global Benefits Attitudes by Towers Watson (2022), revealed that over half of the 35,549 employees surveyed (59%) prefer remote or hybrid work, which enables them to enjoy a higher level of work-life balance.

Additionally, Feeney and Stritch (2017) have highlighted that achieving work-life balance enhances overall efficiency in various aspects of life. Consequently, the survey conducted by Chung, et al. (2020) suggests that as the work environment evolves, organizations should invest more in policies that ensure a satisfied workforce capable of delivering more effectively in the new normal. Prior research suggests a favorable association between work-life balance, and talent retention. Drawing upon this previous research, it is evident that work-life balance correlates positively with talent retention. Consequently, the study hypothesized as follows:

H₄: There is a significant relationship between work-life balance and the talent retention.

Methods

Population, Sample Frame and Sample Location

The survey targets individual female employees across all managerial levels within manufacturing companies situated in Pasir Gudang, Johor. It's important to note that the



definition of managerial levels may vary across organizations. Typically, within the manufacturing industry, lower-level management may encompass roles such as assistant admin/clerk, supervisors, foremen, technicians, and line leaders. Middle-level management typically includes executives and managers, while upper-level management comprises positions such as Chief Executive Officer (CEO), directors, chief executives, or managing directors.

The questionnaire was meticulously designed and deployed through an online data collection tool, utilizing Google Forms. It was distributed to the Human Resource (HR) departments of various manufacturing companies. Consequently, the respondents who participated in the research may have come from diverse backgrounds. Additionally, the questionnaire encompassed a broad spectrum of respondent demographics, including age, ethnic group, marital status, education levels, work tenure, and income levels.

Sample size

The sample size is a subset of the population utilized for research purposes. Saunders, et al. (2019) describe sample size as the actual number of samples selected from the population for the research. Consequently, in this study, the G-Power version 3.1.9.7 software (Faul, Erdfelder, Buchner, & Lang, 2009) was employed to calculate the required sample size. The study adhered to conventional benchmarks for effect size, with Cohen's f set at 0.15, alpha at .05, and power at .80 (equating to $\eta^2 p = .08$, indicative of a medium effect size), accounting for four distinct groups. Based on the G-Power analysis, it was recommended to involve 85 participants, evenly distributed across the four groups, to achieve 80% power. Despite the identified minimum sample size of 85, the researchers opted to administer a total of 100 questionnaires to female employees spanning all management tiers in manufacturing enterprises situated in Pasir Gudang, Johor.

Instrument

In the research questionnaire, the items will be measured using a 5-point Likert scale. To evaluate the four dimensions of human resource practices, 18 items developed by Olaimat and Awwad (2017).

Questionnaire Survey

The questionnaire survey is structured into two principal sections. The first section focuses on demographic inquiries, while the second section examines both dependent and independent variables. Specifically, Section 1 aims to gather respondents' demographic profiles through a series of five detailed questions. These questions are meticulously designed to collect personal information, including marital status, job tenure, age, educational attainment, monthly income, and ethnicity.

In Section 2, the dependent variable examined is employee retention, which is assessed using six items. The section also evaluates four independent variables: workplace environment, career development, workplace flexibility, and work-life balance, each measured by six items. The use of a self-administered questionnaire method is advantageous due to its cost-effectiveness and the convenience it offers, allowing respondents to participate at any time and from any location.

Pilot Test

Before commencing the primary investigation, it is customary to conduct a pilot examination, alternatively termed a preliminary trial or study, on a limited scale (Saunders, Lewis, & Thornhill, 2019). According to Zikmund, et al., (2013), a pilot assessment involves collecting



data from a restricted sample of participants to ascertain the reliability of the instruments and appraise the feasibility of the full-scale research endeavor. Moreover, the pilot evaluation serves to refine the questionnaire, ensuring its lucidity and facilitating respondents' understanding and ease of response (Saunders, Lewis, & Thornhill, 2019). Saunders et al., (2019) further emphasize that after the pilot examination, the validity and reliability of the inquiries can be assessed.

For the pilot test in this study, 30 respondents were chosen. The Cronbach's alpha coefficient for employee retention was determined to be 0.758, denoting favorable reliability. Likewise, the Cronbach's alpha coefficients for workplace environment, career development, and workplace flexibility were calculated at 0.808, 0.832, and 0.803 respectively, all indicative of highly reliable measures. Additionally, the assessment of the Cronbach's alpha coefficient for work-life balance yielded a value of 0.714, denoting satisfactory internal consistency among the assessed items, as outlined in Table 1. Given that all alpha coefficients fall within the range of 0.7 to 0.9, the reliability level is deemed to be robust and dependable.

Variables Number of Item Cronbach's Alpha **Employee Retention** 0.758 6 Workplace Environment 6 0.808Career Development 6 0.832 Flexibility Workplace 0.803 6 Work-life Balance 6 0.714

Table 1: Summary of Reliability Test

Findings

Profile of Respondents

The demographic overview of the gathered data encompasses information from 93 respondents, out of the initial 100 questionnaires disseminated. This summary includes demographics such as age, marital status, ethnicity, level of education, tenure, occupational category, and income. The study is centered on scrutinizing the perspectives of 93 female employees employed within the manufacturing sector.

	Item	Frequency	Percentage
Age	20 – 30	31	33.3%
	31 – 40	25	26.9%
	41 - 50	36	38.7%
	50 and above	1	1.1%
Race	Malay	34	36.6%
	Chinese	54	58.1%
	India	3	3.2%
	Others	2	2.2%
Marital Status	Single	31	33.3%
	Married	58	62.4%
	Other	4	4.3%
Education	SPM	10	10.8%
	STPM/Diploma	27	29.0%
			I

Table 2: Demographic Profile

46

49.5%

Degree



	Master	8	8.6%
	Others	2	2.2%
Year of Service	Less than 3 years	24	25.8%
	3-5 years,	13	14.0%
	6-8 years,	13	14.0%
	9-11 years,	7	7.5%
	Over and 12 years	36	38.7%
Job Categories	Asst. Admin	25	26.9%
	Leaders/Supervisor	7	7.5%
	Executives	47	50.5%
	Manager	13	14.0%
	Others	1	1.1%
Income level	Less than RM1500	4	4.3%
	RM1501 – RM2500,	14	15.1%
	RM2501 – RM3500,	19	20.4%
	RM3501 – RM4500,	19	20.4%
	RM4501 – RM5500,	13	14.0%
	Over RM5501	24	25.8%

Reliability Analysis

The reliability analysis for the actual full study's results is presented in Table 3. A total of 93 data points were tested for reliability. The analysis revealed Cronbach's alpha values of 0.810 for employee retention, 0.831 for workplace environment, 0.883 for career development, 0.793 for workplace flexibility, and 0.758 for work-life balance. According to Zikmund et al., (2013), Cronbach's alpha values ranging from 0.7 to less than 0.8 indicate good internal consistency, while values from 0.8 to less than 0.9 indicate very good internal consistency. Therefore, the items measured demonstrate good to very good internal consistency, suggesting that they are reliable for further analyses.

Table 3: Reliability Analysis Result

1 0014 0 0 1100000 0000 110000 1100000				
Variables	Cronbach's Alpha			
Employee Retention	0.810			
Workplace Environment	0.831			
Career Development	0.883			
Flexibility Workplace	0.793			
Work-life Balance	0.758			

Reviewing the descriptive statistics outlined in Table 4, it is apparent that all factors demonstrate comparable means and medians. The means for each factor surpassed 3.0, indicating relatively elevated values, with the workplace environment (WE) registering the highest mean at approximately 3.83. Conversely, the career development (CD) factor exhibited the lowest mean, totaling 3.37.

Table 4: Descriptive Statistic and Normality Test

Factor	Mean	Median	Standard	Skewness	Significance
			Deviation		
ER	3.55	3.50	0.34	-0.25	0.004



WE	3.83	3.83	0.46	-0.24	< 0.001
CD	3.37	3.5	0.68	-0.13	0.062
WF	3.60	3.50	0.38	0.78	< 0.001
WLB	3.75	3.67	0.49	0.31	0.002

Table 5 presents the correlation results among the variables. The results indicate that employee retention is significantly and positively correlated with career development, work environment, workplace flexibility, and work-life balance. The work environment is also positively correlated with both employee retention and career development but shows a negative correlation with workplace flexibility and work-life balance. Notably, the work environment has a strong positive correlation with career development, with a correlation coefficient of 0.60. No correlation in this sample exceeded 0.71.

Table 5: Correlation Results between Workplace Environment, Career Development, Flexibility Workplace & Work-life Balance and Woman's Employee Retention

Pearson Correlation	ER	WE	CD	WF	WLB
ER	1.000				
WE	0.188	1.000			
CD	0.568	0.600	1.000		
WF	0.037	-0.015	0.125	1.000	
WLB	0.040	-0.033	0.038	0.146	1.000

Since all variables were measured on five-point ordinal scales, it is important to examine the mean scores for each variable's summation score. The analysis reveals that the workplace environment is significantly negatively correlated with both workplace flexibility (r = -0.015, p = 1) and work-life balance (r = -0.033, p = 1). This suggests that respondents experiencing higher levels of workplace flexibility and work-life balance tend to report fewer issues with the workplace environment. Interestingly, perceived career development and workplace environment are positively correlated (r = 0.600, p = 1), indicating that respondents who reported higher levels of a favorable workplace environment also reported higher levels of career development.

Multiple Regression Analysis

Based on the research of Zikmund et al., (2013), the multi-regression analysis has been employed for determining the effect of exceed one independent variable on a single dependent variable, all of which are investigated simultaneously. Consequently, in this section, talent retention will be analyzed by considering multiple independent variables, namely, workplace environment, career development, work-life balance, and workplace flexibility.

The regression outcomes outlined in Table 6 elucidate that 0.602 of the variations in employee retention can be accounted for by the independent variables examined. This is reflected in an R-squared value of 0.363, indicating that the inclusion of the four independent variables—workplace environment, career development, workplace flexibility, and work-life balance—significantly enhances comprehension of employee retention within this study. However, the findings indicate that 87.48% of the variance is attributed to other factors, highlighting the need for further investigation into additional influences.



Model	Unstandardize d (B)	Coefficients SE	Standardized Coefficients (B)	t	Sig
Constant	2.268	0.554		4.096	< 0.001
WE	0.240	0.104	0.248	2.316	0.023
CD	0.650	0.970	0.724	6.705	< 0.001
WF	0.056	0.090	0.054	0.621	0.536
WLB	0.029	0.104	0.024	0.274	0.785

R=0.602, R₂ =0.363, Adjusted R₂ =0.334, F-statistic=12.514, p-value=<0.001

Hypothesis Testing

According to the findings detailed in Table 6, the coefficient for women's career development (CD) is significant and has a positive influence on women's employee retention (Sig: 0.001 < 0.05) with a β coefficient of 0.650. Moreover, the workplace environment (WE) similarly exerts a significant and positive effect on employee retention (Sig: 0.023 < 0.05) with a β coefficient of 0.240. Consequently, hypotheses H1 and H2 are validated. Conversely, hypotheses H3 and H4 are not supported, as evidenced by the findings presented in Table 4.7, because workplace flexibility (WF) does not have a significant impact on employee retention (Sig: 0.536 > 0.05) with a β coefficient of 0.056, and work-life balance (WLB) does not significantly and positively influence women's employee retention (Sig: 0.785 > 0.05) with a β coefficient of 0.029. Furthermore, the probability associated with the F statistic (12.514) for the overall regression model is p < 0.05, indicating the model's significance.

Table 7: Summary of the Result of Hypothesis Testing

Number of Hypothesis	Hypothesis Statement	Result	Supported
Hypothesis 1	Ho: The correlation between the work environment and retaining talent lacks significance. H1: The correlation between the work environment and retaining talent holds considerable significance. Ho: There is no significant	r = 0.240 p = 0.023 (p = <0.05) r = 0.650	Reject Ho and Support H ₁
Hypothesis 2		p = <0.001 $(p = <0.05)$	Reject H ₀ and Support H ₂
Hypothesis 3	Ho: The relationship is not significant between flexibility workplace and talent retention.	r = 0.056 p = 0.536 (p = < 0.05)	Support H ₀ and Reject H ₃



	H ₃ : The relationship is insignificant between workplace flexibility and talent retention.	
Hypothesis 4	Ho: The relationship between work-life balance and talent retention is not existed. H4: There is an established relationship between work-life balance and talent retention.	Support Ho and Reject H4

Discussion and Conclusion

The objective of this research is to assess the correlation between four distinct factors: WE, CD, WF, and WLB, and the retention of female employees across all management tiers within the manufacturing sector. This investigation seeks to explore the primary factors contributing to female employee retention within the manufacturing industry by analyzing the impact of these aforementioned variables.

H_1 Relationship between workplace environment and employee retention

The main objective of this study is to explore the association between workplace environment (WE) and employee retention, marking the initial aim. According to the findings presented in Table 7, the results substantiate hypothesis H_1 , with a calculated p-value of 0.023, falling below the predetermined alpha threshold of <0.05. This indicates a statistically significant association between workplace environment and talent retention. The correlation coefficient of 0.240 suggests a modest yet discernible relationship between these variables.

The obtained value indicates a discernible relationship falling within the range of \pm 0.21 to \pm 0.40, suggesting a modest but clear association. This assertion finds support in the works of Chan, et al., (2021), Ardiansyah, et al., (2020) and Foong, et al., (2015). all of whom have substantiated the correlation between workplace environment (WE) and employee retention (ER). Notably, a positive workplace environment emerges as one of the foremost factors influencing employee retention.

According to study conducted by Balwa, et al., (2021), who posit that the workplace environment serves as a pivotal influencing factor with a significant impact on talent retention. Particularly within manufacturing settings, female employees engaged in production roles and equipment operation necessitate stringent adherence to safety guidelines and protocols (Vilar-Compte, et al., 2021; Geetha, Overton, & Maniam, 2015). This contention is also supported by Barling and Kelloway (1996) whose research indicates that workplaces fostering employee health, balance, and fulfillment tend to retain their workforce. Hence, organizations must ensure a conducive workplace environment to assuage employee concerns, particularly regarding health and safety. Conversely, unfavorable conditions in the workplace may lead to decreased productivity. In sum, the findings of this study underscore the significant relationship between workplace environment and talent retention.

H_2 Relationship between career development and employee retention

The results of this investigation demonstrate that career development (CD) stands out as the most influential predictor of female employee retention. Hence, hypothesis H₂ garners support, with the obtained p-value being <0.001, falling below the designated alpha threshold of <0.05.



Specifically, career development emerges as the foremost predictor of female employee retention, with a correlation coefficient of 0.650 indicating a moderate relationship.

This study is consistent with Leong, et al., (2022), Chan, et al., (2021) and Arokiasamy (2019), who similarly emphasize the significance of career development in employee retention. Previous research by conducts by Vos & Meganck (2009), revealed that investing in career development can deter employee turnover and enhance loyalty. Besides that, many scholars suggested that an organization who wants to strengthen its bond with its employees must invest in the development of these employees (Hsu, Jiang, Klein, & Tang, 2003; Steel, Griffeth, & Hom, 2002). Additionally, Gómez-Mejia, et al. (2012) advocate for continuous career development efforts aimed at nurturing talented employees. Notably, a substantial portion of respondents in this study possessed considerable work experience, with over 38.7% reporting more than 12 years of experience. For many women, career advancement translates into aspirations for promotion or attainment of higher-ranking positions (Bhattacharya, 2022). Furthermore, as women age, their dedication and sense of responsibility towards their work tend to grow, motivating them to perform well and seek recognition from their current employers as a career goal.

*H*³ Relationship between workplace flexibility and employee retention

Objective three of this investigation centers on exploring the connection between workplace flexibility (WF) and employee retention. Through regression analysis, it is found that there is no significant correlation between these variables. As illustrated in Table 4.19, hypothesis H_3 is not upheld, indicating the absence of a noticeable association between workplace flexibility and talent retention. The correlation coefficient of 0.056 indicates an extremely minimal relationship between the two variables. This value supports the notion of a slight, almost insignificant relationship falling within the range of 0.00 to ± 0.20 . Thus, when workplace flexibility is restricted, talent retention is also likely to be low. This discovery aligns with the findings of Azharuddin, et al., (2016), which demonstrated a minimal to nonexistent correlation between workplace flexibility and employee retention, as indicated by a Pearson Correlation, r = -0.029. Additionally, Berber, et al., (2022) conducted a study revealing a negative and statistically significant correlation between workplace flexibility and turnover intentions ($\beta = -0.198$; T = 4.119).

It is notable that a significant majority of respondents in this study, comprising 48.4% who agreed and 36.6% who strongly agreed, expressed the sentiment that "Working shorter hours would negatively impact on my career progress within the organization." This rationale appears disconnected from the implementation of workplace flexibility (WF) and warrants further investigation. This observation is somewhat intriguing, given its contradiction with findings reported in the Employer Brand Research. Consequently, a comprehensive examination of this aspect is imperative to effectively retain and attract potential female talent within the organization.

*H*₄ Relationship between work-life balance and employee retention

Based on the regression analysis depicted in Table 4.7, no notable correlation is found between work-life balance (WLB) and employee retention. The findings of this study reinforce the conclusion that hypothesis H₄ lacks empirical support, as indicated by a p-value of 0.785, surpassing the predetermined alpha threshold of <0.05. Notably, no notable correlation was identified between work-life balance and talent retention. The correlation coefficient of 0.029 suggests a marginal, nearly inconsequential relationship between these variables.

This indicates a congruence with the findings of the research conducted by Lim, et al., (2013). Their study delves into the impact of inter-role conflicts, evaluated in the context of workplace



environment (WE), workplace flexibility (WF), and work-life balance (WLB), on female employee retention. Nonetheless, given the proportion of respondents in this study who expressed this disadvantage, further investigation into this aspect is warranted.

A study conducts by Worrall, et al., (2010), the absence of work-life balance (WLB) serves as a primary obstacle to women's career progression. The research suggests that implementing WLB measures can aid employees in effectively managing their work and family commitments, thereby enhancing employee productivity and organizational performance. Moreover, amidst the pandemic, individuals had ample time for introspection and reassessment of their career priorities. This introspection culminated in what is now known as the Great Resignation (Brace, 2022), characterized by a substantial number of workers departing from their current organizations in pursuit of better opportunities.

This study draws three significant conclusions. Firstly, the majority of women employed in manufacturing firms in Malaysia show a preference for on-site work, underscoring their commitment to fulfilling job responsibilities and a strong interest in career development. Secondly, it highlights the industry-specific nature of manufacturing work, indicating that many job positions, particularly within this sector, are not suitable for remote work due to the essential need for physical presence. Lastly, the study emphasizes the ongoing challenge of achieving work-life balance (WLB), acknowledging its importance as a desired life goal but noting its frequent elusiveness in practice.

The results unequivocally establish a significant correlation between the workplace environment (WE) and career development (CD) with talent retention. A conducive and supportive workplace environment, coupled with ample opportunities for career advancement, exerts a considerable influence on employees' decisions to remain with their current employer or explore alternative prospects. Notably, the absence of these factors can contribute to heightened employee turnover.

However, the study did not uncover substantial evidence supporting a direct association between workplace flexibility (WF) and work-life balance (WLB) with talent retention within the manufacturing sector. This underscores the imperative for a nuanced comprehension of the specific challenges posed by flexible work arrangements and work-life balance, particularly within the manufacturing domain. Considering these conclusions, it is imperative for organizations to recognize and prioritize the critical factors of workplace environment and career development to enhance employee retention. Tailoring strategies to address the unique demands of the manufacturing sector is crucial for achieving sustained success. Continued efforts to understand and improve the benefits for both employees and employers will undoubtedly contribute to fostering a resilient and thriving workforce in the dynamic landscape of the manufacturing industry.

Practical and Social Implications

This study elucidates several theoretical implications, particularly in light of the dearth of research on talent retention within the manufacturing industry. This gap in the existing literature presents an opportune moment for scholars to delve into the specific intricacies and challenges associated with talent retention within this sector. Future research endeavors could explore industry-specific determinants, the impact of technological advancements, and the distinctive organizational methodologies influencing talent retention in manufacturing.

The outcomes of this research contribute significant insights into the determinants impacting the retention of women in the Malaysian manufacturing domain. Particularly noteworthy is the substantial positive correlation identified between the work environment and talent retention, alongside a similar correlation observed between career advancement and talent retention. These findings are consistent with prior studies, underscoring the pivotal role of cultivating a



supportive work atmosphere and furnishing avenues for professional progression in retaining female workforce within the manufacturing sector. Additionally, the study delineates how these four factors necessitate tailored strategies for supervisors and human resource practitioners endeavouring to retain skilled personnel within their organizations. Such practical implications hold particular relevance for the Malaysian manufacturing industry. The research underscores the imperative for organizations to allocate resources towards initiatives like career development programs, coaching, and mentorship for women, acknowledging that providing growth opportunities enhances women's commitment and their meaningful contributions to the organizational milieu.

Additionally, a positive work environment is identified as a crucial factor in retaining women employees. The study posits that cultivating a conducive and secure workplace environment not only promotes employee well-being but also fosters loyalty among them. Additionally, the implementation of employee relations programs emerges as crucial in augmenting commitment and loyalty among the workforce. These findings are corroborated and hence, aligned with those of Leong, et al., (2022), Farah (2016) and Foong, et al., (2015). This underscores the significance of career development, elucidating its pivotal role in influencing talent retention within the manufacturing industry.

In Malaysia, the proportion of female employees in manufacturing companies stands at 39 percent for those that offer training, compared to a notably lower 33 percent in manufacturing firms that do not provide training (Zarka, 2017). According to Kazi & Ghulam (2011), career development (CD) encompasses organized activities undertaken by organizations to enhance employee skills and align them with organizational objectives and goals. However, it is widely acknowledged that women often prioritize family commitments over work responsibilities once they start a family. Hence, any effective policies or interventions aimed at retaining women in the workforce must prioritize family considerations, as emphasized by (ACCA, 2013). Every career path should offer opportunities for advancement and development. A reputable organization must ensure that women receive continuous coaching and mentoring and are duly acknowledged for skills acquired through life experiences and "non-traditional" work backgrounds (O'Neil & Bilimoria, 2005).

The second independent variable, work environment, also demonstrates a significant relationship with talent retention. The results indicate a direct association between the work environment and talent retention, thereby corroborating previous findings by Chan, et al., (2023) and Foong, et al., (2015). A positive work environment emerges as one of the foremost factors influencing female employee retention. Hence, it is imperative for organizations to cultivate a healthy and safe workplace environment to address employees' concerns effectively (Zainal, et al., 2022). Additionally, organizations should implement robust employee relations programs aimed at enhancing employees' commitment to their roles and fostering loyalty to the organization.

The research uncovers a lack of significant correlation between workplace flexibility (WF) and talent retention, contrasting with some anticipated benefits of flexible work arrangements. The study advocates for meticulous planning, monitoring, and augmentation of workplace flexibility by managers to enhance working conditions. Interestingly, the study's findings reveal no substantial relationship between WF and talent retention within the manufacturing industry. This aligns with previous research conducted by Berber, et al., (2022), Kotey & Sharma (2019) Additionally, Tsen, et al., (2021) have suggested that interdependent employees who engage in remote work and utilize flexible scheduling may exhibit a higher inclination to leave their positions. Hence, a survey conducts by Qualtrics (Sofiah, 2022) underscores the importance of implementing family-oriented policies and interventions to retain women in the workforce, acknowledging the significant influence of family priorities on women's decisions.



The survey findings indicate that Malaysian workers believe a four-day workweek could enhance work-life balance (WLB) (86%), mental well-being (82%), productivity (83%), and loyalty to employers. Consequently, the study recommends meticulous planning, monitoring, and enhancement of workplace flexibility by managers to foster improved working conditions. Work-life balance (WLB) has been recognized as a crucial workplace attribute for retaining employees. However, when examined alongside the work environment, no significant relationship is identified between work-life balance and talent retention. The study acknowledges the contemporary importance of work-life balance but underscores potential challenges in its implementation. This finding is supported by Kargwell (2008), who observed that female employees often receive limited organizational support, leading them to prioritize family obligations over career advancement. Consequently, this prioritization can negatively impact female employees' career progression and contribute to their underrepresentation in senior management positions (Lim, Tan, & Benjamin, 2013). Nonetheless, it is imperative to emphasize that work-life balance remains a significant and pressing issue (Downes & Koekemoer, 2011). Therefore, organizations should offer enhanced work-life balance practices to employees to foster retention.

Limitations and Suggestions for Future Research

The foundation for future research is laid by identifying significant factors, such as work environment and career development, that influence women's retention in the manufacturing sector. Researchers can build on these findings by further investigating these factors or exploring additional variables that contribute to talent retention within the industry.

The unexplained variance (R-Square) of 63.70% in talent retention indicates that there are other factors or variables impacting women's retention in manufacturing that have not been accounted for. Future studies could aim to identify and examine these additional factors. This could involve a more detailed investigation into individual differences, organizational culture, or external influences that affect talent retention. Moreover, researchers should consider broadening the scope of their studies to include international comparisons. Comparing talent retention practices and challenges across different countries or regions within the manufacturing industry could provide valuable insights and help identify best practices.

References

2022 Global Benefits Attitudes Survey. (2 June, 2022). Retrieved from WTW: https://www.wtwco.com/en-be/insights/2022/06/2022-global-benefits-attitude-survey

Abd Rahman, A., Mohammad Talha, M., & Mohd Hilmi, H. (2013). A Study of Flexible Working Hours and Motivation. *Asian Social Science* 9(3), 208-215.

ACCA. (2013). Retaining Women in the Workforce. Malaysia: Talent Corp Malaysia.

Alon, T., Doepke, M., Olmstead-Rumsey, J., & Tertilt, M. (31 December, 2020). *The Impact of COVID-19 on Gender Equality*. Retrieved from ideas: https://ideas.repec.org/p/bon/boncrc/crctr224_2020_163.html

Alshmemri, M., Shahwan-Akl, L., & Maude, P. (2017). Herzberg's Two-Factor Theory . *Life Science Journal* 2017;14(5), 12-16.

Amabile, T. M. (2019). Educating leaders who make a difference in the world. *Perspectives on Psychological Science*, 14(1), 7-11.

ARC. (27 April, 2022). *Sourcing & Manufacturing In Malaysia: An Introduction*. Retrieved from ARC Group: https://arc-group.com/malaysia-manufacturing-sourcing/

Asghar, M., Tayyab, M., Gull, N., Zhijie, S., Shi, R., & Tao, X. (2021). Polychronicity, work engagement, and turnover intention: The moderating role of perceived organizational



- support in the hotel industry. *Journal of Hospitality and Tourism Management*, 49, 129-139.
- Atkinson, L. (26 May, 2023). Reengaging 'quiet quitters' through new career possibilities. Retrieved from Willis Towers Watson: https://www.wtwco.com/en-be/insights/2023/05/reengaging-quiet-quitters-through-new-career-possibilities
- Azeez, S. A. (2017). Human Resource Management Practices and Employee Retention: A Review of Literature. *Journal of Economics, Management and Trade 18*(2), 1-10.
- Bal, A. S. (2010). A Study on the Perception of Work-Life Balance Policies among Software Professionals. *The IUP Journal of Management Research*, 9(2), 51-79.
- Balwa, M. S., Chukwue, G. K., Asheq, A. S., & Alao, M. M. (2021). Effect Of Job Benefits, Employee Turnover, Working Environment On Employee Satisfaction: Evidence From Hospitality Industry Of Malaysia. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(11), 6076-6083.
- Bandana, N., & John, B. (2019). Employee Retention in the VUCA World: Challenges and Strategies. *International Journal of Recent Technology and Engineering (IJRTE)*, 8(3S2), 84-88.
- Barling, J., & Kelloway, K. E. (1996). Job insecurity and health: The moderating role of workplace control. *Stress Medicine*, 12(4), 253-259.
- Berber, N., Gašić, D., Katić, I., & Borocki, J. (2022). The Mediating Role of Job Satisfaction in the Relationship between FWAs and Turnover Intentions. *Journals Sustainability*, 14(8), 10.3390/su14084502.
- Bernsen, P., Segers, M., & Tillema, H. (2009). Learning under pressure: Learning strategies, workplace climate, and leadership style in the hospitality industry. *Int. J. Human Resources Development and Management*, 9(4), 358-373.
- Bernsen, P., Segers, M., & Tillema, H. H. (2009). Learning under pressure: learning strategies, workplace climate, and leadership style in the hospitality industry. *Published Online*, 358-373.
- Bhatnagar, J. (2007). Talent management strategy of employee engagement in India ITES employees: key to retention. *Employee Relations*, 29(6), 640-663.
- Bhattacharjee, A., Jahanshahi, A. A., Polas, M. R., Hossain, M. I., & Asheq, A. S. (2019). Customer Care Service Management is Moving Forward to Achieve Sustainable Customer Retention in Every Industry. Does it play a Role to Increase Brand Retention? . *nternational Journal of Management and Sustainability* (8)2, 88-97.
- Buheji, M. (2020). The New Normal A New Era Full of Inspiration and Resilience after COVID-19. *International Journal of Inspiration & Resilience Economy* 2020, 4(2), 1-2.
- Burke, R. J., & McKeen, C. A. (1994). Training and Development Activities and Career Success of Managerial and Professional Women. *Journal of Management Development*, 13(5), 53-63.
- Caringal-Go, J. F., Teng-Calleja, M., Bertulfo, D. J., & Manaois, J. O. (2022). Work-life balance crafting during COVID-19: exploring strategies of telecommuting employees in the Philippines. *Community, Work & Family 25(1)*, 112-131.
- Carroll, N., & Conboy, K. (2020). Normalising the 'new normal': changing tech-driven work practices under pandemic time pressure. *International Journal of Information Management* 55(3), 1-6.
- Chan, X. W., Shang, S., Brough, P., Wilkinson, A., & Lu, C.-q. (2023). Work, life and COVID-19: a rapid review and practical recommendations for the post-pandemic workplace. *Asia Pacific Journal of Human Resources*, 61(2), 275-276.



- Chandranshu, S., & Ruchi, S. (2012). Factors Affecting Employee Retention: A Comparative Analysis of two Organizations from Heavy Engineering Industry. *European Journal of Business and Management Vol 4*, No.3, 145-162.
- Chowdhury, A. R. (January, 2013). Low female labor force participation in Sri Lanka: Contributory factors, challenges and policy implications. *South Asia Region Human Development Sector*, p. Vol. 68.
- Chung, G., Chan, X. W., Lanier, P., & Ju, P. W. (2020). Associations Between Work-Family Balance, Parenting Stress, and Marital Conflicts During COVID-19 Pandemic in Singapore. *researchgate.net*, 1-35.
- Creagh, M., & Brewster, C. (1998). Identifying good practice in flexible working. In *Employee Relation*, *Volume 20* (pp. 490-503). Emerald Group Publishing Limited.
- Das, B. L., & Baruah, M. (2013). Employee Retention: A Review of Literature. *IOSR Journal of Business and Management (IOSR-JBM)*, 14(2), 08-16.
- Dessler, G. (2019). Human Resource Management, Global Edition, 16th edition. Pearson Higher Ed.
- Dion, M. J. (2006). The impact of workplace incivility and occupational stress on the job satisfaction and turnover intention of acute care nurses. *University of Connecticut ProQuest Dissertations Publishing*, 1-24.
- Dogan, E., & Nyen, W. K. (2010). Plant size, turnover and productivity in Malaysian manufacturing. *Monash University Department of Economics*, 1-25.
- DOSM. (17 November, 2021). *Statistics on Women Empowerment in Selected Domains, Malaysia, 2021*. Retrieved from Department of Statistics Malaysia (DOSM): https://www.dosm.gov.my/portal-main/release-content/statistics-on-women-empowerment-in-selected-domains-malaysia-2021
- DOSM. (29 July, 2022). *Current Population Estimates, Malaysia, 2022*. Retrieved from DOSM: https://www.dosm.gov.my/portal-main/release-content/current-population-estimates-malaysia-2022
- DOSM. (12 May, 2023). *Gross Domestic Product First Quarter 2023*. Retrieved from Department Of Statistic Malaysia: https://www.dosm.gov.my/portal-main/release-content/c4a9dbc1-8b79-11ed-96a6-1866daa77ef9
- DOSM. (11 April, 2023). *Index od Industrial Production*. Retrieved from Department of Statistics Malaysia: https://www.dosm.gov.my/uploads/release-content/file_20230413113727.pdf
- DOSM. (13 March, 2023). *Monthly Manufacturing Statistics, Malaysia*. Retrieved from Department Of Statistics Malaysia: https://www.dosm.gov.my/portal-main/release-content/09996425-81c4-11ed-96a6-1866daa77ef9
- Downes, C., & Koekemoer, E. (2011). Work-life balance policies: challenges and benefits associated with implementing flexitime. *Journal of Human Resource Management* 9(1), 1-13
- El-Erian, M. A. (10 October, 2010). *Navigating the New Normal in Industrial Countries Per Jacobsson Foundation Lecture*. Retrieved from International Monetary Fund: https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp101010
- Eric, N. C., Lam, Z., Kumar, R., Charles, R., & Vimala, K. (2012). An effectiveness human resource management practices on employee retention in institute of higher learning: A regression analysis. *International Journal of Business Research and Management (IJBRM)*, 3((2), 60-79.
- Farah, F. A. (2016). Factors Influencing Employee Retention: A Study of Manufacturing Company. *School of Business Management UUM*.



- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175-191.
- Feeney, M. K., & Stritch, J. M. (2017). Family-friendly policies, gender, and work–life balance in the public sector. *SSRN Electronic Journal*, *39*(3), 422-448.
- Foong, M. L., Joy, S. H., Lim, E. Z., Phang, Z. B., & Tiong, X. Y. (2015). Talent retention: a study in malaysia manufacturing industry. *Universiti Tunku Abdul Rahman*, 1-203.
- Frye, W. D., Kang, S., Huh, C., & Lee, M. (2020). What factors influence Generation Y's employee retention in the hospitality industry?: An internal marketing approach. *International Journal of Hospitality Management*, 85, 46-55.
- Garavan, T. N., Carbery, R., & Rock, A. (2012). Mapping Talent Development: Definition, Scope and Architecture. *European Journal of Training and Development* 36(1), 5-24.
- Geetha, S. A., Overton, J. B., & Maniam, B. C. (2015). Flexible Working Arrangements, Work Life Balance and Women in Malaysia. *International Journal of Social Science and Humanity*, 5(1), 34-39.
- Gómez-Mejía, L. R., Balkin, D. B., & Cardy, R. L. (2012). Flexible time (flextime). In L. R. Gómez-Mejía, D. B. Balkin, & R. L. Cardy, *Managing Human Resources 7th Editiong* (pp. 80-81). Prentice Hall, Upper Saddle River.
- Hair Jr., J. F., Money, A. H., Samouel, P., & Page, M. (2007). *Research Methods for Business*. John Wiley & Sons.
- Halim, H., & Azizan, F. L. (2017). Examining Malaysian leader characteristics in a manager subordinate relationship. *Jurnal Komunikasi: Malaysian Journal of Communication*, 33(3), 214-230.
- Hall, L., & Atkinson, C. (2006). Improving working lives: flexible working and the role of employee control. *Employee Relations*, (28)4, 374-386.
- Hashim, A., Azman, N. S., Ghani, M. A., & Sabri, M. F. (2016). The Relationship Between Work-life Balance and Employee Retention. *Proceeding of the 3rd International Conference on Management & Muamalah 2016 (3rd ICoMM)*, 316-322.
- Helena, L. (2021). Changes in workplace practices during the COVID-19 pandemic: the roles of emotion, psychological safety and organisation support. *Journal of Organizational Effectiveness: People and Performance*, 97-128.
- Herzberg, F. (January, 2003). *One more time: How do you motivate employees?* Retrieved from Harvard Business Review: https://hbr.org/2003/01/one-more-time-how-do-you-motivate-employees
- Herzberg, F., Mausner, B., & B.-C. Snyderman. (1959). *The Motivation to work*. New York: John Wiley & Sons.
- Hilla, E. J., Grzywaczb, J. G., Allena, S., Blancharda, V. L., Matz-Costac, C., Shulkinc, S., & Pitt-Catsouphes, M. (2021). Work-life balance crafting during COVID-19: exploring strategies of telecommuting employees in The Philippines. *Community, Work & Family 11(2)*, 149-163.
- Hsu, M. K., Jiang, J. J., Klein, G., & Tang, Z. (2003). Perceived career incentives and intent toleave. *Information & Management*, 40, 361-369.
- Idris, A. (2014). Flexible Working as an Employee Retention Strategy in Developing Countries Malaysian Bank Managers Speak. *Journal of Management Research* (14)2, 71-86.
- ILO. (2018). World employment social outlook: Trend for women 2017. Geneva: International Labour Organization.



- Izmayani, S., Khalijah, R., Husna, J., & Nurul, H. A. (2016). Women and Barriers for Upward Career Advancement A Survey at Perak State Secretariat, Ipoh, Perak. *Procedia Economics and Finance* 35, 574 581.
- Jakobsh, D. R. (2012). Barriers to Women's Leadership. SAGE Encyclopedia of Leadership SAGE, 77-81.
- Jayalakshmi, V. (2023). The Shift from the New Normal to the Old Normal: Challege and Solution. In T. Chakraborty, N. Mishra, M. Ganguly, & B. Chatterjee, *Human Resource Management in a Post-Epidemic Global Environment: Roles, Strategies and Implementation* (pp. 1-5). CRC Press.
- Kang, H. (30 July, 2021). Sample size determination and power analysis using the G*Power software. Retrieved from Korea Health Personnel Licensing Examination Institute: https://synapse.koreamed.org/articles/1149215
- Karatepe, O. M. (2013). High-performance work practices, work social support and their effects on job embeddedness and turnover intentions. *International Journal of Contemporary Hospitality Management* 25(6), 903-921.
- Kargwell, S. (2008). Is the glass ceiling kept in place in Sudan? Gendered dilemma of the worklife balance. *Gender in Management 23(3)*, 209-224.
- Kazi, & Ghulam, M. (2011). The contribution of individual variables: job satisfaction and job turnover. Interdisciplinary. *Journal of Contemporary Research in Business* 3(5), 984-991.
- Kenton, W. (16 September, 2022). *Manufacturing: Definition, Types, Examples, and Use as Indicator*. Retrieved from Investopedia: https://www.investopedia.com/terms/m/manufacturing.asp
- Kin, L. W., Ahmad, N., Kamaruddin, N. K., & Mamat, T. N. (2022). Human Resource Practices and Employee Retention in Manufacturing Industry. *Research in Management of Technology and Business*, (3(2), 113-131.
- Kirchmeyer, C. (2000). Work-Life Initiatives: Greed or Benevolence Regarding Workers'. *Trends in organizational behavior*, 7, 79-93.
- Kossivi, B., Xu, M., & Kalgora, B. (2016). Study on Determining Factors of Employee Retention. *Open Journal of Social Sciences* 04(05), 261-268.
- Kotey, B., & Sharma, B. (2019). Pathways from flexible work arrangements to financial performance. *March 2019Personnel Review 48*(2), 731-747.
- Kurdi, B., & Alshurideh, M. (2020). Employee retention and organizational performance: Evidence from banking industry. *Management Science Letters*, 10(16), 3981-3990.
- Lawrence, A. T., & Weber, J. (2014). *Business and Society: Stakeholders, Ethics, Public Policy* (14th ed.). New York: McGraw Hill.
- Levenson, A. (10 April, 2020). *A Long Time Until the Economic New Normal*. Retrieved from MIT Sloan Management Review: https://sloanreview.mit.edu/article/a-long-time-until-the-economic-new-normal/
- Levinson, M. (6 February, 2017). What Is Manufacturing? Why Does the Definition Matter? *Congressional Research Service*, pp. 1-17.
- Lim, V. K., Teo, T. S., & See, S. K. (2001). Perceived Job Image Among Police Officers in Singapore: Factorial Dimensions and Differential Effects. *The Journal of Social Psychology* 140(6), 740-750.
- Lim, Y. M., Tan, L. P., & Benjamin, C. Y. (2013). A Study on Women's Career Advancement in Malaysia. *Journal of Human and Social Science Research*, 2(1), 21-34.
- Linehan, M., Ann, T. M., & James, W. S. (2002). Career progression of young female accountants: Evidence from the accountancy profession in Ireland. *Journal of European Industrial Training* 26(2/3/4), 117-124.



- Luque-Vílchez, M., Mesa-Pérez, E., Husillos, J., & Larrinaga, C. (2019). The influence of proenvironmental managers' personal values on environmental disclosure: The mediating role of the environmental organizational structure. *Sustainability Accounting Management and Policy Journal*, 10(1), 41-61.
- Maia, T. (2011). Examination of Herzberg two-factor motivational theory of mid-level managers and employees impact on job satisfaction and retention in a sales organization. *Capella University ProQuest Dissertations Publishing*, 1-24.
- Malaysia: Female labor force participation. (12 July, 2021). Retrieved from The Global Ecomony:
 - https://www.theglobaleconomy.com/Malaysia/Female_labor_force_participation/
- Mbugua, R. W., & Kamaara, M. (2017). Influence of recruitment and selection criteria on employee retention in the insurance industry in Kenya. *Journal of Human Resource and Leadership*, 2(7), 17-40.
- McKeown, J. L. (2002). Retaining Top Employees. McGraw Hill Professional.
- McKinsey. (8 June, 2020). *Reimagining the office and work life after COVID-19*. Retrieved from McKinsey & Company: https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/reimagining-the-office-and-work-life-after-covid-19
- Mehdiabadi, A. H., & Li, J. (2016). Understanding Talent Development and Implications for Human Resource Development: An Integrative Literature Review. *Human Resource Development Review* 15(3), 263-294.
- Mehta, M., Kurbetti, A., & Dhankhar, R. (2014). Study on Employee Retention and Commitment. *International Journal of Advance Research in Computer Science and Management Studies* (2)2, 154-164.
- Mohameh, B., & Aisha, B. (2020). Characteristics of 'Problem-Based Learning' in Post-COVID-19 Workplace. *Human Resource Management Research* 2020, 10(2), 33-39.
- Mohlala, J., Goldman, G. A., & Goosen, X. (2012). Employee retention within the Information Technology Division of a South African Bank. SA Journal of Human Resource Management 10(2), 1-11.
- Nishiura, C., Inoue, Y., Kashino, I., Nanri, A., Endo, M., MasafumiEguchi, . . . Yamamoto, S. (2021). Diagnosis-specific Cumulative Incidence of Return-to-work, Resignation, and Death Among Long-term Sick-listed Employees: Findings From the Japan Epidemiology Collaboration on Occupational Health Study. *Journal of Epidemiology* 32(9), 1-21.
- Olaimat, D., & Awwad, B. (2017). Exploring the Relationship between Human Resource Practices and Employee Retention in the House of Representatives in Jordan. *International Journal of Business and Social Science*, 8(10), 178-185.
- O'Neil, D. A., & Bilimoria, D. (2005). Women's career development phases: Idealism, endurance, and reinvention. *Career Development International*, 10(3), 168-189.
- OSHA. (4 April, 2000). *Occupational Safety and Health Act 1994*. Retrieved from dosh.gov.my: https://www.dosh.gov.my/index.php/legislation/eregulations/regulations-under-occupational-safety-and-health-act-1994-act-514/522-pua-131-2000-1/file
- Pittino, D., Visintin, F., Lenger, T., & Sternad, D. (2016). Are high performance work practices really necessary in family SMEs? An analysis of the impact on employee retention. *Journal of Family Business Strategy*, 7(2), 75-89.
- Pratt, M., & Florentine, S. (12 March, 2022). *Employee retention: 10 strategies for retaining top talent*. Retrieved from CIO.com: https://www.cio.com/article/251060/employee-retention-10-strategies-for-retaining-top-talent.html



- Sadick, A.-M., Kpamma, Z. E., & Agyefi-Mensah, S. (2020). Impact of indoor environmental quality on job satisfaction and self-reported productivity of university employees in a tropical African climate. *Building and Environment* 181(2), 102-107.
- Saunders, M. N., Lewis, P., & Thornhill, A. (2019). Research Methods for Business Students 8th edition. Pearson.
- Scandura, T. A., & Lankau, M. J. (1997). Relationships of Gender, Family Responsibility and Flexible Work Hours to Organizational Commitment and Job Satisfaction. *Journal of Organizational Behavior*, 18(4), 377-391.
- Sekaran, U., & Bougie, R. (2014). *Research Methods for Business: A Skill-Building Approach* 6th Edition. John Wiley & Sons, Inc.
- Statistic Times. (26 August, 2021). *Gender ratio in the World*. Retrieved from Statistic Times: https://statisticstimes.com/demographics/world-sex-ratio.php#:~:text=The%20population%20of%20females%20in,101.68%20males%20per%20100%20females.
- Steel, R. P., Griffeth, R. W., & Hom, P. W. (2002). ractical retention policy for the practical manager. *Academy of Management Executive*, 18(2), 149-169.
- Tan, T. H., & Waheed, A. (2011). Herzberg's Motivation-Hygiene Theory and Job Satisfaction in the Malaysian Retail Sector: Mediating Effect of Love of Money. *Asian Academy of Management Journal* 16(1), 73-94.
- Thakur, H. K. (2021). Research Design. *Research Methodology in Social Sciences, New Delhi: Corvette*, 53-60.
- Tsen, M. K., Gu, M., Tan, C. M., & Goh, S. K. (2021). Effect of Flexible Work Arrangements on Turnover Intention: Does Job Independence Matter? *International Journal of Sociology*, 51(6), 451-472.
- Twelfth Malaysia Plan 2021-2025. (2021). Retrieved from Ministry of Economy Malaysia: https://rmke12.epu.gov.my/en
- Vicky, K., Rohani, S., Khalidah, A. K., Muhammad, K. L., & Siti, A. N. (2023). Perceived Organizational Support and Talent Retention of Women Engineers in the Malaysian Oil and Gas Sector: A Conceptual Framework. *Journal of Hunan University (Ntural Sciences)* 50(1), 186-193.
- Vilar-Compte, M., Hernández-Cordero, S., Ancira-Moreno, M., Burrola-Méndez, S., Isabel Ferre-Eguiluz, I. O., & Navarro, C. P. (2021). Breastfeeding at the workplace: a systematic review of interventions to improve workplace environments to facilitate breastfeeding among working women. *International Journal for Equity in Health*, 20, 110.
- Vos, A. D., & Meganck, A. (2009). What HR managers do versus what employees value: Exploring both parties' views on retention management from a psychological contract perspective. *Personnel Review*, 38, 45-60.
- WEF. (2 November, 2017). *The Global Gender Gap Report 2017*. Retrieved from World Economic Forum: https://www.weforum.org/reports/the-global-gender-gap-report-2017
- Wells, M., & Thelen, L. (2002). What does your workspace say about you? The influence of personality, status, and workspace on personalization. *Environment and Behavior*, 34(3), 300-321.
- World Bank. (2022). Malaysia Ecomic Monitor. Malaysia: World Bank Malaysia.
- Worrall, L., Harris, K., Stewart, R., Thomas, A., & McDermott, P. (2010). Barriers to women in the UK constructionindustry. Engineering, *Construction and Architectural Management*, 17, 268-281.
- Yazinski, S. (2009). *Strategies for retaining employees and minimizing turnover*. Retrieved from http://hr.blr.com/whitepapers.aspxid=80396.



- Zainal, N., Wider, W., Lajuma, S., Ahmad Khadri, M., Taib, N., & Joseph, A. (2022). Employee Retention in the Service Industry in Malaysia. *Sec. Work, Employment and Organizations*, 7, 928951. doi: 10.3389/fsoc.2022.928951.
- Zarka, M. A. (2017). Women Workers in Malaysia's Private Sector. *Enterprise Note*, *35*, 1-6. Zeytinoglu, I. U., & Denton, M. (2006). Satisfied Workers, Retained Workers: Effects of Work and Work Environment onHomecare Workers' Job Satisfaction, Stress, Physical Health, and Retention. *Canadian Health Service Research Foundation*, 117-132.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business Research Methods 9th Edition*. Cengage Learning.
- Ziyuan, W., Cong, W., & Tonghui, W. (2016). Estimation of Location Parameter in the Skew Normal Setting with Known Coefficient of Variation and Skewness. *International Journal of Intelligent Technologies & Applied Statistics*. *9*(3), 191-208.